		Pushing the En	velope
		2004 Scien	
		Grade Level Expe	ectations
Louisiana Science			
Grade 5			
Activity/Lesson	State	Standards	
			Demonstrate a change in speed or direction of
Types of Engines (an object's motion with the use of unbalanced
pgs. 11-23)	LA	SCI.5.PS.9	forces
			Describe new substances formed from common
Chemistry (pgs. 25-			chemical reactions (e.g., burning paper
41)	LA	SCI.5.PS.6	produces ash)
			Demonstrate a change in speed or direction of
Physics and Math			an object's motion with the use of unbalanced
(pgs. 43-63)	LA	SCI.5.PS.9	forces
			Demonstrate a change in speed or direction of
Rocket Activity (pgs.			an object's motion with the use of unbalanced
69-75)	LA	SCI.5.PS.9	forces
		Pushing the En	
		2004 Scien	
		Grade Level Expe	ectations
Louisiana Science			
Grade 6			
Activity/Lesson	State	Standards	
			Predict the direction of a force applied to an
Types of Engines (object and how it will change the speed and
pgs. 11-23)	LA	SCI.6.PS.23	direction of the object
Chemistry (pgs. 25-		201.2.20.4	Measure and record the volume and mass of
41)	LA	SCI.6.PS.1	substances in metric system units
Chemistry (pgs. 25-		001.0 00.4	Differentiate between the physical and chemical
41)	LA	SCI.6.PS.4	properties of selected substances
Physics and Math		001.0 00.40	Li de e
(pgs. 43-63)	LA	SCI.6.PS.19	Identify forces acting on all objects
Physics and Math		001 0 00 00	Draw and label a diagram to represent forces
(pgs. 43-63)	LA	SCI.6.PS.20	acting on an object
Physics and Math		201 2 20 24	Determine the magnitude and direction of
(pgs. 43-63)	LA	SCI.6.PS.21	unbalanced (i.e., net) forces acting on an object
5			Demonstrate that an object will remain at rest or
Physics and Math			move at a constant speed and in a straight line i
(pgs. 43-63)	LA	SCI.6.PS.22	it is not subjected to an unbalanced force
D			Predict the direction of a force applied to an
Physics and Math		001070	object and how it will change the speed and
(pgs. 43-63)	LA	SCI.6.PS.23	direction of the object
Rocket Activity (pgs.		001 0 70 15	
69-75)	LA	SCI.6.PS.19	Identify forces acting on all objects
Rocket Activity (pgs.		00: 0 70 75	Draw and label a diagram to represent forces
69-75)	LA	SCI.6.PS.20	acting on an object
Rocket Activity (pgs.			Determine the magnitude and direction of
69-75)	LA	SCI.6.PS.21	unbalanced (i.e., net) forces acting on an object
			Demonstrate that an object will remain at rest or
Rocket Activity (pgs.			move at a constant speed and in a straight line i
69-75)	LA	SCI.6.PS.22	it is not subjected to an unbalanced force

		Pushing the En	velope
		2004 Science	
		Grade Level Expe	ectations
Louisiana Science			
Grade 8			
Activity/Lesson	State	Standards	
Types of Engines (Explain the relationships among force, mass,
pgs. 11-23)	LA	SCI.8.PS.7	and acceleration
Physics and Math			Explain the relationships among force, mass,
(pgs. 43-63)	LA	SCI.8.PS.7	and acceleration
Physics and Math			Relate Newton's laws of gravity to the motions
(pgs. 43-63)	LA	SCI.8.ESS.39	of celestial bodies and objects on Earth
Rocket Activity (pgs.			Explain the relationships among force, mass,
69-75)	LA	SCI.8.PS.7	and acceleration
		Duching the En	valene
		Pushing the Env	
		Grade Level Expe	
Louisiana Science		Grade Level Expe	ectations
Grade 9			
Activity/Lesson	State	Standards	
Types of Engines (Otate	Otaridards	
pgs. 11-23)	LA	SCI.9.PS.29	Differentiate between mass and weight
Types of Engines (001.0.1 0.20	Differentiate between made and weight
pgs. 11-23)	LA	SCI.9.PS.31	Differentiate between speed and velocity
Types of Engines (001.0.1 0.01	Plot and compare line graphs of acceleration
pgs. 11-23)	LA	SCI.9.PS.32	and velocity
Types of Engines (00	Calculate velocity and acceleration using
pgs. 11-23)	LA	SCI.9.PS.33	equations
Chemistry (pgs. 25-			Name and write chemical formulas using
41)	LA	SCI.9.PS.4	symbols and subscripts
Chemistry (pgs. 25-			Identify chemical reactions that commonly occur
41)	LA	SCI.9.PS.28	in the home and nature
,			Demonstrate Newton's three laws of motion
Physics and Math			(e.g., inertia, net force using F = ma, equal and
(pgs. 43-63)	LA	SCI.9.PS.34	opposite forces)
, ,			Demonstrate Newton's three laws of motion
	1		
Rocket Activity (pgs.			(e.g., inertia, net force using F = ma, equal and